

COMMODORE INTER-OFFICE MEMO

to: Sig Hartmann
from: John Feagans
date: October 13, 1983

M. Tomczyk

subject: Magic Desk II testing

You will be receiving a new set of ROMs and four blank cartridges for testing. I have additional blank cards which can be sent if you have competent people to do assembly. Otherwise we will do a few at a time here.

The following changes have been made in your Magic Desk II ROMs:

1. Improvements to the spread sheet editor:
 - ✓a. HOME key brings Page top and left
 - ✓b. CLR key clears current field
 - ✓c. F1 copies current field to copy box
 - ✓d. F2 replicates copy box to current field
 - ✓e. F3 horizontal tab to next field right
 - ✓f. Line number indicator shows current line
 - ✓g. Default tabs set every 10
2. General bugs in spread sheet:
 - ✓a. Make hardcopy Printout without Printing operators
 - ✓b. Printout in UPPER/GRAPHICS character set
 - ✓c. Compute twice in succession destroyed the editing copy
 - ✓d. Default tabs set over user selected tabs
 - ✓e. Not able to scroll down to lines 32 and 33
3. General bugs in calculator:
 - ✓a. SPEED UP key Pressing
 - ✓b. Clear keyboard queue to prevent type ahead
4. Improvement to HELP menu
 - ✓a. tutorial on spread sheet completely revised

TO: Larry Ercolino
FROM: Lynn Kachelries

DATE: Oct. 19, 1983
cc: Sig Hartmann
Paul Goheen

SUBJECT: Evaluation of Magic Desk II

Attached are the test results of Magic Desk II. In addition to testing the product, we have provided a summary of our comments in the following paragraphs.

The concept behind the Magic Desk program is an excellent one. This approach should appeal to the personal/home computer market. The idea of an integrated program utilizing a picture approach in its user interface has tremendous potential. As the Magic Desk now stands, however, the potential is unrealized. The features that have been implemented are impractical both as stand-alone functions and as parts of the integrated whole. There are too many keystrokes (or steps) required and too much time that is wasted for this product, as it stands, to be used as a valuable tool. Major points of each feature where improvements are necessary are as follows:

Typewriter - In order to be utilitarian, the typewriter must be updated to, at the very least, an unsophisticated wordprocessor. This would include insert and delete capabilities and line wrap.

Spreadsheet - This feature might be the most unusable one of the package. The number of keystrokes required to do the simplest operations will quickly turn off any user. It is not easy to even move around the spreadsheet with cursor keys. If complex formulas cannot be entered into the spreadsheet, the functionality again is diminished. Since the spreadsheet moves after a computation is done, it is also extremely hard for the user to figure out what part of the spreadsheet he/she is in. The printout is also lacking. At minimum, the decimals should be aligned. Since the Magic Desk spreadsheet does not contain most features found in other spreadsheets, it is doubtful if it should be referred to as a spreadsheet.

Calculator - It does not seem to be possible to multiply negative numbers. If this is true, it is limiting. It is also hard to position the joystick correctly when trying to select arithmetic functions, the on/off keys and the number keys (although the number keys can be accessed from the keyboard).

TEST RESULTS

PRODUCT: MAGIC DESK II

TEST #: 1

TESTED BY: Ginger Bardi
Tom Ziegler
Lynn Kachelries

DATE: Oct. 14, 1983

PROBLEMS

1. Typewriter - If the right-most margin is reached by any other way than typing to it (i.e., tabbing or cursor keys), it is impossible to type anything at the margin.
2. The file cabinet was selected with no disk in the drive. From the error screen, the Commodore key was pressed. From the help menu the exit/menu was selected. The manilla file screen appeared with garbage on the folders where the name would normally appear. The program should not let a user get to the folder screens or beyond without a disk in the drive.
3. The help screen was selected from the desk. The magic finger was positioned at the "Next Menu" option and the fire button was pressed. Most of the time, the next menu is flashed on the screen and the program returns to the desk before the user has a chance to read what is on the help screen.
4. Help menus - The picture should be closer to the word which describes it. As it stands now, it is very confusing. The spreadsheet-help menu is one example of this problem.
5. Help menus - The selection area should be redefined. For example, on the "help menu-desk" you can point and touch the edge of the typewriter and nothing happens when you press the fire button.
6. The clock is slow.
7. Spread sheet help menu (the calculator section of this menu) - the word "place" should be on one line rather than split.
8. Pressing the commodore and shift keys quickly several times will cause the program to lock up and not respond to any input.
9. Text entered on the spreadsheet appears as uppercase. When printed it appears as lowercase.
10. Going between the spreadsheet and the typewriter causes the text to change from upper/lower to upper/graphics and vice versa.

11. When going from the spreadsheet to the typewriter dots appear on the first line of the typewriter document.
12. The program lets you save something in a blank file folder. The default number that would normally be inserted on that folder instead appears on the first folder.
13. If the printer loses power while printing a spreadsheet the screen scrolls up and the spreadsheet disappears.
14. If the printer loses power while using the adding machine, the calculation that was printing appears in the middle of the screen.
15. When printing is requested, the program accesses the disk drive. Consequently, the disk light flashes and continues to flash after printing is terminated.
16. The "R" is missing in the Read Error message when accessing the file drawer.
17. When you go from the typewriter to the spreadsheet with a letter in memory, the first line is missing.
18. While in the typewriter at the right margin, if you press the delete key two characters are deleted rather than just one.
19. The first time you print a letter or a spreadsheet garbage is printed in the first line. See example =i.
20. This problem happens when going from the spreadsheet to the typewriter. The dots in the first line of the typewriter were typed over or deleted. The spreadsheet was then selected. The column dividers were missing and text could be typed on every line including the black lines.
21. While in the spreadsheet, if you enter a number, then select the help screen then return to the spreadsheet, the spreadsheet block is cleared. While using the calculator, if you select help the calculator is cleared and turned off. Generically, the help screen should return you to where you were when you selected it.
22. Occasionally when using the file area, reverse characters print on the printer. See attached example G.
23. While formatting a disk, the program displayed a message that the formatting was complete. A red dot flashed in the center of the screen several times before the screen changed. It looked like the light on the disk drive.
24. There doesn't seem to be a way to multiply negative numbers in the calculator.

25. Spreadsheet - Normally, when the enter/view function is selected after the calculations have been done, the "=?"'s are redisplayed instead of the calculated answers. One time, the calculated answers remained on the screen and the user was able to edit them. When "compute" was reselected, the answers were recalculated correctly. However, when "enter/view" was reaccessed, the numbers returned to the edited values. (See example 2.)
26. This situation occurred when trying to format a disk. A 'y' response was given to the "Ready" prompt. An error message "Format error - try again or try another disk" was displayed. The same disk was used to try again. The error message "Your disk is either full or unformatted" was generated. Seems like wrong message.
27. Adding Machine - Clear/all was selected, followed by "=" . The printer snapped out by printing 4 rows of lines. See example 3.

SUBJECTIVE COMMENT

1. When the file function is selected and there is no disk in the drive, the user must either put a formatted disk in the drive or format a new disk. There should be a way to return to the desk without doing either.
2. When the cartridge is plugged in and the first screen comes up, there are no instructions on how to use the product (for example, which port to plug the joystick in. One suggestion would be a help screen that comes up automatically after the title screen.
3. It is very frustrating not to be able to insert characters or delete characters without leaving a space when in the typewriter mode. It is realized that the intent of the typewriter mode was to emulate a manual typewriter and not have full word processing features. However, the lack of these editing features is extremely limiting.
4. There should be decimal alignment in the spreadsheet printout.
5. Joystick maneuvering is difficult especially in the calculator when you try to turn it off.
6. The error message "DISK FULL OR DISK UNFORMATTED" should be two separate messages depending on the error since the solutions are different.
7. In the spreadsheet help screen, the word block should be spelled out rather than abbreviated "blk". Also the instructions regarding the placement of the equals sign and the question mark are not clear. In addition, the word "movearound" is not in the dictionary.

8. It seems to be impossible to enter a complex formula into a spreadsheet. The small grey boxes and the grey area on top of the box will only accept one operator. This severely limits the functionality of the spreadsheet.
9. There should be a way to reformat a disk without getting a disk error first.
10. In the spreadsheet, to add two numbers required 35 keystrokes and pressing the fire button twice. This is very cumbersome.
11. Spreadsheet - One depression of a cursor key should take you to the next appropriate block. To move within a block spaces or characters would be used.
12. No where does it tell you to use the enter/view function of the spreadsheet before using the compute function of the spreadsheet or that you have to use the compute function to display results. The help screen should be more descriptive.
13. There should be a 'margin unlock' for the left margin.
14. The left side of the ribbon holder on the typewriter covers the most recently typed character. It might be better if the ribbon holder was shortened.
15. When using the spreadsheet to enter numbers, only one column of numbers is visible at a time. Also, there is no indication of which row in the spreadsheet you are entering data into. In general, entering any calculations with the spreadsheet is awkward and confusing because you cannot see what you just entered and you don't know where you are.
16. Spreadsheet - There does not seem to be any easy way to add two columns together without entering "=?" all the way down the third column.
17. Currently, in order to go from one function to another (i.e., from file to typewriter), it is necessary to go back to the desk each time. The program would be much easier to use if the interim steps could be eliminated when going from function to function. At the very least, it should be possible to go from file to typewriter and back because these two functions are very much interrelated.
18. It is very cumbersome to have to file each page of a letter separately.
19. The program seems to go to disk too many times. It might be possible to read in names of manilla folders AND white folders of the selected file drawer at the same time. This would eliminate a disk access.
20. The column width of the spreadsheet cannot be modified. This limits the functionality.

21. Basic Tutor Help from calculator screen - First, replace "allows easy access to all Commodore Basic functions from the keyboard" with "allows easy access to arithmetic functions from the screen". Second, why is it called "Basic Tutor" instead of scientific calculator? Third, replace "function keys are selected only with the hand" with "arithmetic functions are selected only with the hand". Fourth, the help screen says "use keyboard or joystick to select". Select what?
22. The same symbol of a calculator should not be used for both the calculator and compute in the spreadsheet. It is especially confusing in the spreadsheet mode because it can be taken to mean "return to the calculator".
23. In the help screen for the card file, the term "relational data base" will not be understood by the average user. This should be changed. Also, the word "available" is spelled wrong.
24. In the help screen for the door, it should be stated that this function is not available with this cartridge. Also line up the second line of number one with the rest of the items.
25. In the help screen for the telephone, "telecommunications" is spelled wrong.
26. In the help screen from the desk, the wastebasket help screen is incomplete when it states "destroys document in typewriter" since it can also destroy a document in the spreadsheet. This should be stated.
27. Help menu - single page - wastebasket - Since the wastebasket in this case deletes a document from the file, this should be EXPLICITLY stated. Also, the spacing is inconsistent.
28. Help menu - single page - document - This should be updated to include the spreadsheet.
29. Since it is possible to have a typewriter/spreadsheet document in memory and also a document just read from a file there should be very detailed explanations as to which document would be saved if the save option is selected.
30. On one of the calculator help screens, it would be helpful if it was stated that the last value calculated is displayed in the calculator portion of the spreadsheet screen.

31. It should be mentioned somewhere that commas are not accepted in the spreadsheet numeric fields.
32. The program allows overwriting of files in the file folders. This is fine and is a needed feature. However, the program would be enhanced if a warning were given when a file contained text and the user gave a command to save something else in the same file. This way a user could have a chance to cancel the save request.
33. There did not seem to be a way to transfer the calculation result saved from the calculator mode into the spreadsheet. The calculation result appears on the spreadsheet screen but there is not a one-keystroke command to get that result into the spreadsheet.
34. The top of the clock does go completely over the right-most digit of the time.
35. When the printer is selected and there is nothing to print, a bell sounds. When the wastebasket is selected and there is no document in memory, there is no bell sound. This is inconsistent.
36. The "Next Menu" heading in help screens would be more aptly titled "Next Help Screen" or "More Help" or something along those lines.
37. In the Help screens, sometimes the magic finger is positioned on the EXIT and sometimes it is not. Should be consistent.

~~fitting~~ - It is tedious to have to file separate pages of a document. It is frustrating to be able to use only 28-30 folders out of a possible 300 folders on any one disk. There are also excessive disk accesses and too many steps involved in saving or reading a page of a document.

Program Flow - In order to go from one function to another, it is necessary to go back to the desk each time. The program would be much easier to use if the interim steps could be eliminated when going from function to function. At the very least, it should be possible to go from file to typewriter and back because these two functions are very much interrelated.

• EXAMPLE 1

~~58~~

B

Given, L, 324.65 and 324.65 + 2 = 324.67

$$\begin{array}{r} 234.65 \\ + 324 \\ + 2 \\ \hline = 468.65 \end{array}$$

On 11/1/93 at 10:45:00 AM 1993, **Henrique Bourbon** wrote:

Thank you for your recent inquiries concerning the Beverly Hills Diet Plan. One of our sales offices received your letter and Passed it on to us. We handle all corporate decisions such as this.

I do not completely understand what you wish us to do. We Publish several books on the diet. Do you wish to convert one of them to disk for your Program?

My curiosity is Piqued. I will be available to meet with you October 19 (Wednesday) at 2:00. If you should require directions to our offices you have our Phone number.

Sincerely,

Henrique Bourbon

Example 1

EXAMPLE G

7

EXAMPLE 2

~~102.54~~

100.34

+

1.2

102.54

+213.54

+

+2

+ 215.54

+2.00

+

+3.43

+ 5.43

+4.3

+

+2.8

+ 7.10

+7

+

+1.2

+ 8.20

+3

+

+1.22

+ 4.22

= 330.18

= 11.85

I had changed this answer to this - when select computer the answer is 101.54

Why didn't the
spreadsheet go back
to = ?

JOHN - IF YOU TYPE OVER THE "?" THIS HAPPENS ALSO -

Example 3 .

④ππ', L, 双子座星系团的成员星系数与成员星系的绝对星等分布

767697745
+
0

= 0
0

= 0
0

= 0

4 - SUBJECTIVE

38

5 There should be
decimal alignment

$$\begin{array}{r} 100.34 \\ + 1.2 \\ \hline 101.54 \end{array}$$

$$\begin{array}{r} +213.54 \\ +2.00 \\ +2 \\ \hline +215.54 \end{array} \quad \begin{array}{r} +4.3 \\ +3.43 \\ = \\ + 5.43 \end{array} \quad \begin{array}{r} +7 \\ +2.8 \\ = \\ + 7.10 \end{array} \quad \begin{array}{r} +3 \\ +1.2 \\ = \\ + 8.20 \end{array} \quad \begin{array}{r} = 330.18 \\ = 11.85 \\ \hline = 342.03 \end{array}$$

342.03

Magic Desk II

M Tomczyk

NOTES
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MAGIC DESK II CALCULATE AND FILE

Your MAGIC DESK II cartridge contains five major features:

1. CALCULATOR - The animated calculator contains all the special functions of a high-level electronic calculator, and you can print your results on a Commodore printer or printer/plotter, just like an "adding machine". You can also use your MAGIC DESK calculator to compute results and transfer the results to the FINANCIAL LEDGER.
2. FINANCIAL LEDGER - This simplified electronic spreadsheet lets you calculate columns and rows of numbers AUTOMATICALLY. Just fill in the labels and numbers to create everything from a family budget to a professional business accounting summary or project planning report.
3. TYPEWRITER - The same MAGIC DESK typewriter included in MAGIC DESK I is included in MAGIC DESK II. The typewriter lets you edit and add graphics to your financial ledger files, as well as writing reports and letters.
4. DISK/FILE - MAGIC DESK lets you save and retrieve all the letters, reports, and ledger calculations you create...using your COMMODORE DISK DRIVE...but you don't have to learn any special commands. The files on the screen are automatically linked to your disk drive. All commands are "pictorial".

5. AUTOMATIC PRINTING - Your MAGIC DESK II cartridge works with Commodore printers and printer/ plotters...the calculator, ledger and typewriter are all linked to your Commodore printer. To make a paper copy of any file you create, just "point" at the picture of the printer.

Getting Started

Before you begin, make sure you have these items: MAGIC DESK II cartridge, COMMODORE 64 or EXECUTIVE 64 (SX-64 Portable) Computer, Commodore Single Disk Drive, Commodore Printer or Printer/Plotter and Joystick (or other desktop controller). To use your MAGIC DESK II cartridge, just follow these simple steps:

Step 1: Connect your computer to a television set or monitor (see User's Manual), but DON'T TURN ON YOUR COMPUTER YET! To avoid

damaging your software cartridge, always TURN OFF your computer BEFORE connecting or disconnecting a cartridge.

Step 2: INSERT your MAGIC DESK II cartridge in the computer's CARTRIDGE SLOT. Make sure it's firmly seated but don't force it.

Step 3: TURN ON your computer. The MAGIC DESK screen will appear. Adjust the SOUND on your television set or monitor.

Step 4: Connect your COMMODORE DISK DRIVE and COMMODORE PRINTER to the computer (unless you're using an EXECUTIVE 64 Portable with built-in disk drive, which only requires that you connect the PRINTER).

Step 5: Connect a JOYSTICK or DESKTOP CONTROLLER (such as a "mouse") to the computer. Be sure to connect it to PORT 2...NOT Port 1.

Step 6: Connect your PRINTER or PRINTER/PLOTTER. The PRINTER or PRINTER/PLOTTER is usually plugged into the Commodore DISK DRIVE...you can also use a PRINTER or PRINTER/PLOTTER by connecting it directly to the computer.

Troubleshooting Checklist:

(same as MAGIC DESK I)

MAGIC DESK II Features: (Art - DESK SCREEN with lines to copy)

Look at the MAGIC DESK screen. The following items are used in your MAGIC DESK II cartridge:

- CALCULATOR - _____ separate functions (addition, subtraction, etc.)

- FINANCIAL LEDGER - label the columns and rows with any names you want...change the width of any column (?)

- TYPEWRITER - Works just like an electric typewriter, complete with MARGIN and TAB settings and other features. Filing and printing are easy.

- FILING CABINET - 3 file drawers. Each drawer contains 10 file FOLDERS. Each folder contains 10 PAGES. You can label each file FOLDER and each PAGE within the folders.

Note: I typed $5 + 2 + 3 * 2 =$ and got an error.

USING THE CALCULATOR

(Get notes from John Feagans)

USING THE FINANCIAL LEDGER

Your ledger is fun and easy to use...just move the POINTING FINGER to the picture of the FINANCIAL LEDGER (the green book with the \$ sign on it) and press the ACTION BUTTON.

CHANGING THE WIDTH?

USING THE CALCULATOR (DOESN'T KEEP CALCULATION ON SCREEN)

WHAT IS PURPOSE OF CALCULATOR DISPLAY...HOW TO "ENTER" IN BLOCK?

1. Typewriter scale on screen corresponds to your TYPEWRITER page. The ledger is automatically displayed in your TYPEWRITER AND ON YOUR LEDGER...so if you erase a page from either the typewriter or ledger, it will be lost.

2. Transferring a calculation from the calculator to a block on the ledger. *F2* *F1*

3. Setting up a chart...order of calculation (always left to right?)

4. How ledger is displayed on typewriter page and how you can change, edit or enhance.
5. Titles/labels
6. Vertical operators - how they work
7. Horizontal calculations.
9. Right justification? Built in?
10. If the RESULT of any calculation is too LARGE, the computer will either display the result in SCIENTIFIC NOTATION or else give you a warning sound. RESULT is always shown with 2 decimal places.

✓ Cannot do $6 * \pi \text{PI} =$

Cannot do RND and INT to get whole no. RND -

INT of RND .77 = \emptyset

Home always takes to top left corner

Clear clear field you're using box where cursor is

F3 - tab to right

F4 - tab to left

I. Start with example - $\boxed{C=}$

If you still have questions

Cannot put Number on grey box must be operator
OR LETTER heading

Ledger picture shows line you're on.

PRINTOUT - letters are always upper case

SET COL.WIDTH : Default = ~~12~~
8 digits

No LOWER CASE

Holding Q down and hit U causes TAB. Hit each key separately
DON'T HOLD 2 KEYS DOWN AT SAME TIME

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